Curriculum vitae

Name: Evan Hajani

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Personal Information:

Full name : Evan Abdulrahman Haji Ali Hajani

Gender: Female **Marital status**: Married

Citizenship : Australian and Iraqi

Education:

• 2018: Ph.D. of Engineering–Hydrological Engineering, Western Sydney University, Sydney, Australia

- 2010: Master of Engineering (Water Resources), University of Duhok, Duhok, Kurdistan Region, Iraq
- 2005: B.Sc. Water Resources Engineering, University of Duhok, Duhok, Kurdistan Region, Iraq

Current Post:

November 2020 - present

- Position: Lecturer and Research Supervisor, University of Duhok, Kurdistan Region, Iraq (Full-time)
- Responsibilities:
 - 1. Preparing and delivering lectures to undergraduate students; preparing, administrating, marking exams, tests papers to evaluate students' progress in the following units:
- Mathematics
- Engineering Analysis
- Numerical Analysis
- Final Year Project
- 2. Supervising two postgraduate students in their research requirements. Reviewing their reports and final theses.

Thesis title of the postgraduate students:

- 1. Impact of Climate Change on Historical Rainfall Data in Kurdistan Region of Iraq.
- 2. Simulation Models for Generating Rainfall Data in Selected three sites in Kurdistan Region, Iraq

Teaching Experience:

• Western Sydney University, NSW, Australia 2014-2017 Casual Academic at the school of engineering

• The University of Duhok, Department of Water Recourses Engineering Duhok, Kurdistan Region, Iraq

Position: Lecturer (Full-time) 2010-2012

Responsibilities: Preparing and delivering lectures to undergraduate students; preparing, administrating, and marking exams and tests papers to evaluate students' progress in the following units:

Irrigation System Hydrology Fluid Mechanics Final Year Project

Position: Demonstrator (Full-time) 2005-2007

Responsibilities: Preparing and delivering tutorial sessions to undergraduate students, grading examination papers in the following subjects:

Hydraulic Structures, Water Resources Management and Economy Engineering Drawing

Work Experience:

- Water Resources Engineer in Kurdistan region, Iraq 2000-2011
- Casual Academic, Western Sydney University, NSW, Australia 2014-2017

Water Engineer/Hydrologist, EnviroWater Sydney Pty Ltd, 69
Brierley Crescent, Plumpton, NSW 2761, Australia, 2016

Skills:

• Language skills:

Fluent speaker in Kurdish and Arabic and good speaker in English

• Software skills:

FORTRAN, AutoCAD, R software, XLSTAT, Map Info, Vertical Mapper, EasyFit, SPSS software, MS Office, ArcGIS, WMS, and statistical analysis.

Research Interests:

- Rainfall statistics based on stationary and nonstationary
- Impact of global warming on climate change
- Investigate the effects of climate change on weather systems such as rainfall, runoff, and temperature
- Rainwater harvesting system.
- Assessment of flood risk under climate change.
- watershed modeling research

Research Publications:

• Journal Articles

- **Hajani E.** and Rahman A. (2018). Characterising Changes in Rainfall: A Case Study for New South Wales, Australia. International Journal of Climatology, 38(3), 1452–1462. http://onlinelibrary.wiley.com/doi/10.1002/joc.5258/epdf, IF = 3.760.
- **Hajani E.**, Rahman and Ishak E. (2017). Trends in Extreme Rainfall in the State of New South Wales, Australia. Hydrological Sciences Journal, 62 (13), pp.2160-2174, IF = 2.182, ERA 2010 Rank B, Q1, IF=2.372.

- **Hajani E.** and Rahman A. (2014). Rainwater utilization from roof catchments in arid regions: A case study for Australia, Journal of Arid Environments, 111, pp.35-41, IF=2.313.
- **Hajani E.** and Rahman A. (2014). Reliability and cost analysis of a rainwater harvesting system in peri-urban regions of Greater Sydney, Australia, Water, 6, pp. 945-960, IF=2.056.
- Hajani E. and Rahman A. (2013). Effectiveness of Rainwater Harvesting System in Peri-Urban Region: A Case Study for the Greater Sydney. Journal of Hydrology and Environment Research, 1(1), pp.21-29.
- Hajani E. and Rahman A. (2018). Design Rainfall Estimation: Comparison between GEV and LP3 Distributions At-Site and Regional Estimates. Natural Hazards, 93(1), 67-88, IF=1.901
- Hajani E. (2020). Climate change and its influence on design rainfall at-site in New South Wales state, Australia. Journal of Water and Climate Change, (S1), 251–269. IF=1.989
- Rahman A., Snook C., Haque MM., **Hajani E.** (2020). Use of design curves in the implementation of a rainwater harvesting system. Journal of Cleaner Production, 121292. IF=9
- Hajani E. and Klari Z. (2022). Trends Analysis in Rainfall Data Series in Kurdistan Region, Iraq. Modeling Earth Systems and Environment, 1-14. impact score: 2.84
- **Hajani E.**, Shajee K., Kaleel F. and Abdulhaq H. (2022). Investigating Variations in Rainfall Data in Kurdistan Region, Iraq. Arabian Journal of Geosciences, 1-21. IF=1.989
- Hajani E. (2022). Impacts of Climate Change and Variability on IFD Curves in NSW, Australia. (Submitted to Australasian Journal of Water Resources)
- Hajani E. and Musa I. (2022). Trend analysis in rainfall data in Duhok city, Kurdistan region, Iraq. (Submitted to Hydrological Sciences Journal)
- Hajani E., khalil I., Musa I. and Shajee K. (2022). Trend Analyses and Homogeneity Tests in Rainfall data for Duhok City, Kurdistan Region, Iraq. (Submitted to Natural Hazard)

• Hajani E. (2022). Development of Intensity Duration Frequency Curve Rainfall Data in Duhok City, Kurdistan Region, Iraq. (Submitted to Water Resources)

Book Chapter

 Rahman A. and Hajani E. (2017). Rainwater Harvesting in Arid Regions of Australia. Book Chapter (NO. 26) in Handbook: Environmental Impacts and Analysis of Drought and Water Scarcity [Edited by Saeid Eslamian and Faezeh A. Eslamian], New York: CRC Press, 2017

• Conference Papers

- Hajani E., Paul H. and Rahman A. (2016). Trends in Rainfall in New South Wales, Australia. 56th New Zealand Hydrological Society and the 37th Australian Hydrology and Water Resources Symposium, 28 Nov 02 Dec 2016, New Zealand.
- Hajani E., Rahman A. and Rahman A. S. (2015). Trend Detection in Short and Long Duration Storm Events: A Case Study for NSW, Australia. 21st International Congress on Modelling and Simulation, 29 Nov to 4 Dec 2015, Gold Coast, Australia.
- Hajani E., Rahman A., Ishak E., Haddad K. (2015). Impacts of Serial Correlation on Trends in Rainfall Annual Maximum Series Data in NSW, Australia. The 3rd International Conference on Water Resources (International Conference of Water Engineering (ICWR), Kuala Lumpur, Malaysia, 20-24 Nov 2015.
- Hajani E., Rahman A., Ishak E. and Rahman A. S. (2015). Detection of Trends in Extreme Rainfall Events in NSW, Australia. 36th Hydrology and Water Resources Symposium. 36th Hydrology and Water Resources Symposium, 7-10 Dec 2015, Hobart.
- Hajani E., Rahman A. and Haddad K. (2014). Trend analysis for Extreme Rainfall Events in New South Wales, Australia. ICESSE Sydney 2014: XII International Conference on Environmental Systems Science and Engineering, 15-16 Dec 2014, Sydney, Australia, 8 (12), Part VI, 701-706.
- Hajani E., Rahman A., Haddad K. (2014). Trend Analysis for Extreme Rainfall Events in New South Wales, Australia,

- International Conference on Environmental Systems Science and Engineering, 15-16 Dec 2014, Sydney, Australia.
- Hajani E. and Rahman A. (2017). Changes in Daily Rainfall Data in NSW State, Australia. 1st International Conference on Water and Environmental Engineering 22 -24 Nov 2017, Sydney, Australia.
- Snook C., Rahman A., van der Sterren M., Haque M., **Hajani E.** (2015). Developing design curves for rainwater harvesting in Greater Sydney. 9th International Water Sensitive Urban Design (WSUD 2015)
- Rahman A.S., Rahman A., Haddad K., Ishak E., **Hajani E.**, Laz O., Karim F. (2015). Spatial distribution of the trends in annual maximum flood flow in north Australian river catchments. 36th Hydrology and Water Resources Symposium: The art and science of water.

• Thesis:

- Evan Hajani (2018). Impact of Climate Change on Design Rainfall. Ph.D. thesis, Western Sydney University, NSW, Australia.
- Evan Hajani (2010). Application of Different Models for Development of Instantaneous Unit Hydrograph for Solag Watershed. M.Sc. thesis, University of Duhok, Kurdistan Iraq.

Referees:

Available upon request